

CLAIMS

1. A transmission system comprising:

program scheduling information acquiring means for
acquiring program scheduling information from an
externally-provided program scheduling information providing
firm and a broadcasting network;

program scheduling information encoding means for
encoding the acquired program scheduling information in
accordance with a designated encoding method; and

10 transfer means for transferring the coded data.

2. A transmission system as claimed in claim 1

wherein said designated encoding method is a encoding method
for controlling a display.

15

3. A transmission system as claimed in claim 1

wherein said designated encoding method corresponds to an XML
(extensible marking language).

20

4. A transmission system as claimed in claim 1

wherein said transfer means transmits update information which
is updated in real time.

5. A transmission system as claimed in claim 1

25 wherein said transmission system is comprised of:

an information providing unit for providing the coded
information to a network other than the broadcasting network.

6. A transmission system as claimed in claim 1
wherein said designated encoding method corresponds to an HTML
(hyper text markup language).

5 7. A receiver comprising:
storage means for storing thereinto both program
scheduling information and program control information which
is updated in real time; and
merging means for merging the stored program control
10 information with the stored program scheduling information
to thereby produce new program scheduling information.

8. A receiver as claimed in claim 7 wherein said
receiver is comprised of:
15 program scheduling information receiving means for
receiving program scheduling information; and
program scheduling information display means for
displaying thereon received data.

20 9. A receiver as claimed in claim 7 wherein said
receiver is comprised of:
program control information receiving means for
receiving the program control information which is updated
in real time.

25 10. A transmission system as claimed in claim 4
wherein said program control information corresponds to at
least a program content, a program starting time instant, and

RECEIVED
U.S. PATENT AND TRADEMARK OFFICE

program duration, which are updated.

11. A receiver as claimed in claim 7, or claim 9
wherein said program control information corresponds to at
5 least a program content, a program starting time instant, and
program duration, which are updated.

12. A transmission system as claimed in claim 4
wherein said transmission system is comprised of:

10 program scheduling information encoding means for
generating link information in which a relationship between
the program control information and the program scheduling
information is described; and

transfer means for transmitting the link information.

15 13. A receiver as claimed in claim 9 wherein said
receiver is comprised of:

program table generating/display means for generating
a program table from program control information, and for
20 displaying the produced program table.

14. A receiver as claimed in claim 13 wherein both
the program scheduling information and the program table are
displayed in conjunction with each other by display control
25 means for managing a relationship between the program control
information and the program scheduling information based upon
the link information so as to control displays of the program
scheduling information and the program table.

15. A transmission system as claimed in claim 1
wherein information which is updated in real time is acquired
by program scheduling information acquiring means.

5

16. A receiver as claimed in claim 8 wherein said
receiver is comprised of:

a storage apparatus for previously storing thereinto
program scheduling information.

10

17. A receiver as claimed in claim 16 wherein the
program scheduling information is acquired from at least one
of the broadcasting network, the operated storage apparatus,
and the network.

15

18. A receiver as claimed in claim 16 wherein the
latest program information is continuously provided by that
while the program control information is received in real time,
both the program information and the program control information
20 are united to be displayed.

25 19. A receiver as claimed in claim 13 wherein the
program control information is acquired from at least one of
the broadcasting network, the operated storage apparatus, and
the network.

20. A receiver as claimed in claim 16 wherein the
program scheduling information is constituted by more than

one mono-media.

21. A receiver as claimed in claim 20 wherein the mono-media is constituted by a still image, a moving picture,
5 or voice.

22. A receiver as claimed in claim 13 wherein said receiver displays program information related to a program in addition to the program table.

10

23. A transmission system as claimed in claim 1 wherein the program scheduling information is constituted by program scheduling information of the own media, or other media.

15

24. A receiver as claimed in claim 7, or claim 9 wherein the program scheduling information is constituted by program scheduling information of the own media, or other media.

20

25. A broadcasting system comprising:

a transmission system equipped with program scheduling information acquiring means for acquiring program scheduling information from an externally-provided program scheduling information providing firm and a broadcasting network, and transfer means for transferring the program scheduling information by way of either a broadcasting network or a communication; and

a receiver equipped with: program scheduling information receiving means for receiving the program scheduling

information from said transmission system; program control information receiving means for receiving from a broadcasting network and the like, program control information which describes therein a program content, program starting time, program duration, and the like, which are updated in real time due to a special newscast and an extension of a sports broadcasting program; and merging means for updating the content of the program scheduling information based upon the content of the program control information.

10

26. A broadcasting system comprising:

a transmission system in which link information describing therein a relationship between a content of program control information and a content of program scheduling information is transferred in connection with program scheduling information by transfer means; and

a receiver comprised of program table generating/display means for generating a program table from the program control information and for displaying the program table; and display control means for managing a relationship between program control information and program scheduling information based upon the link information so as to control displays of the program scheduling information and the program table, whereby the program scheduling information can be displayed in conjunction with the program table.